

Agri-Gate

News from the Primary Growth Partnership

Ministry for Primary Industries
Manatū Ahu Matua



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Justine's Desk



Welcome to the first issue of our PGP newsletter for 2014, which looks set to be another busy and productive year for the PGP.

We have two new programmes looking to start operations in earnest in the near future: Lifestyle Wines and Precision Fertiliser. These programmes had their business plans approved by the Director-General of MPI in 2013 and we're currently completing contract negotiations.

The funding round held in September 2013 resulted in the Investment Advisory Panel (IAP) approving two proposals to proceed to business plan development. Of the twelve declined proposals, some have been asked to either resubmit revised proposals or engage in further discussion with MPI. These valuable discussions and crucial planning work will ramp up over the first half of 2014.

Our tenth funding round will also be held this year, meaning an opportunity for further new PGP programmes. We're yet to confirm the timing for the funding round but proposals are likely to be due around July.

The 15 PGP programmes already underway are also set for a busy year, with some significant streams of work within the programmes reaching key milestones.

Over the December/January period, things certainly didn't stop either, with financial audits of three programmes being completed and the resulting reports published on the MPI website. It was very reassuring to see no significant concerns arising from these audits. Six PGP programmes have now been audited with no major audit findings detected.

The first PGP programme progress review, of the New Zealand Sheep Industry Transformation Programme, was also started in the latter half of 2013 and will be completed shortly. A summary report will be available on the MPI website. Other programme reviews will be undertaken over the course of 2014 and in subsequent years—as programmes reach an appropriate point in their implementation. The reviews are independent of both MPI and the programme.

This issue of our newsletter showcases the Steepland Harvesting programme. Take a look and see how this programme is using technology and ingenuity to make tree felling safer for the forestry industry than ever before.

Justine Gilliland



NZ Winegrowers CEO Philip Gegan, Minister for Primary Industries Hon Nathan Guy and MPI PGP Director Justine Gilliland at announcement of the Lifestyle Wines PGP.

From the Chair

This year New Zealand's economy is forecast to be robust and the agriculture sector is expected to play a major part in the positive outlook for 2014. In our Prime Minister's words you are the backbone of our economy.

Overall we now have 15 programmes up and running, with two in contract negotiation and others in the planning stages following success in our funding round last year. The total PGP funding commitment from both government and industry now stands at \$700 million – \$329 million from the Crown and the balance from industry. At its first meeting for 2014 the IAP reviewed a number of quarterly reports from our 15 programmes. It noted some significant progress towards intermediate outcomes and some issues and decisions around stop-go points.

Our newest programme to get underway is the Red Meat Profit Partnership, a \$64 million programme to drive sustainable, long term profits for New Zealand's red meat sector. The programme focuses on supporting farmers in the adoption of best practice behind the farm gate and between the farm and processor. This programme is a great example of the collaboration that the PGP programme is driving – all for the good of New Zealand.

I personally am thrilled at the level of spill over benefits that PGP is driving – in particular the collaboration between primary industry participants. I was privileged to attend an event just last week where I could see collaboration occurring first hand between not only senior executives, but also across the sector as a whole – all helping to lift innovation and productivity across New Zealand.

Overall the panel is looking forward to another positive year ahead and the continued pan-sector spill over benefits in the areas of collaboration, increasing our skilled resources and regional development. PGP continues to be a key vehicle to support sustainable growth and value for New Zealand.



Programme Spotlight Harvesting into the future

World demand for New Zealand logs and timber continues to increase annually – combined log and timber exports currently make up around 10 percent of New Zealand's total primary sector exports. With growing demand comes growing production from the forests. On the ground it means forestry technology needs to keep pace to ensure there is stability in supply, while keeping those involved in the forestry industry out of harm's way.



The ClimberMAX in action.

Harvesting into the future continued

An estimated 40 percent of forestry related accidents occur when forestry crew members are either tree felling or attaching and detaching the heavy chains or cables used to haul trees from the forest. Steep slopes, heavy undergrowth and poor weather can also increase the risk of injury.

In 2010, Future Forests Research Limited (FFR), a partnership of forest industry companies, teamed up with the Ministry for Primary Industries (MPI) under the Primary Growth Partnership to co-invest in innovative harvesting technologies that will improve productivity and worker safety in steepland harvesting in New Zealand.

The 6-year partnership between FFR and MPI, known as the Steepland Harvesting Programme, aims to reduce harvesting costs on steep country by 25 per cent, grow harvest machinery manufacturing in New Zealand to future proof the sector, and make harvesting jobs safer.

Harvesting technology in motion

Currently, harvesting using wheeled or tracked machines is not usually permitted on slopes greater than 22 degrees for safety reasons – this limits the efficiency and safety of logging operations on steep hill country.

The Steepland Harvesting PGP Programme has supported the development of a steep slope harvester machine called ClimbMAX,

built by Trinder Engineers in Nelson for Kelly Logging Ltd, and now commercially available from ClimbMAX Equipment Ltd.

The ClimbMAX harvester is an excavator-based system that can fell and bunch trees on slopes of up to 45 degrees. It has the potential to significantly improve harvesting productivity, resulting in less cost, and to reduce the number of work place safety incidents, by removing the need for a chainsaw operator.

It's the first true steep slope harvester, independently certified by a Chartered Professional Engineer, to meet New Zealand's approved code of practice for forestry.

ClimbMAX uses a computer controlled hydraulic winch system that helps with traction and mobility and allows the machine to operate safely on steep slopes. The harvester not only fells trees but also bunches them together to improve the payload for extraction by cable haulers.

As part of the programme, FFR, along with Scion and commercial partner Alpine Shovel Yarders Limited, have also built a hydraulic-controlled hauler grapple – called the Alpine Grapple – which is designed to increase grapple use on steepland and therefore remove people from hazardous areas. It's lighter and cheaper to run and can be controlled remotely by the hauler operator. The new hauler grapple can rotate to pick up felled trees more effectively and pull trees out of gullies that are too dangerous for people to access.

Eyes on the job

In addition to the ClimbMAX harvester and the Alpine Grapple, the PGP programme has developed other technologies such as a new camera system called CutoverCam. It uses wireless camera technology to provide clear views of forestry operations on steep slopes.

The CutoverCam transmits high resolution video footage of ground operations to the hauler operator. The hauler operator can operate the camera remotely and zoom in to gain a clearer view of what's happening on the ground from a screen mounted in the cab of the hauler. This means ground crews are in full view of the hauler operator who no longer needs to rely on radio messages and sound signals from ground crews.

Together the ClimbMAX, the new Alpine Grapple and CutoverCam, enabled through the PGP, will ensure New Zealand's plantation forest industry can harvest more efficiently to meet domestic and international demand, while ensuring those who work in the forestry industry are safer than ever before.

The creation of the PGP partnership has resulted in a renewed interest in harvesting innovation to improve productivity and safety across harvesting operations, which can only be positive for the forest industry.

This PGP partnership will also further enhance New Zealand's competitive advantage in the international forestry markets and help future proof the industry.



CutoverCam keeps eyes over forestry operations.

Steepland Harvesting – highlights to date

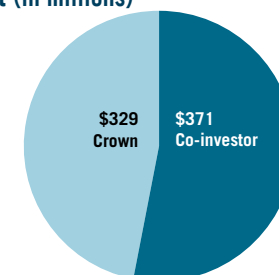
- ClimbMAX harvesters are now operating in Nelson, Hawke's Bay and British Columbia in areas considered hazardous for conventional tree felling and extraction practices. A fourth machine is currently under construction.
- In initial trials, the ClimbMAX harvester showed an increase in the volume of logs cut and bunched ready for extraction of 65 tonnes per unit per day (a 26 percent increase in productivity) and a net cost saving of approximately \$3.50 per tonne (a 10 percent saving) over conventional harvesting methods. A direct cost saving to the industry of \$8 million per annum is estimated within five years.
- The first remote controlled grapple-mounted camera unit – Cutover Cam – was developed in 2012, with commercial release in September 2013.
- The first unit of the commercial model of the Alpine Grapple carriage has been implemented by a harvesting company.

Overview of Primary Growth Partnership Investment

For 17 Announced Programmes as at 30 November 2013

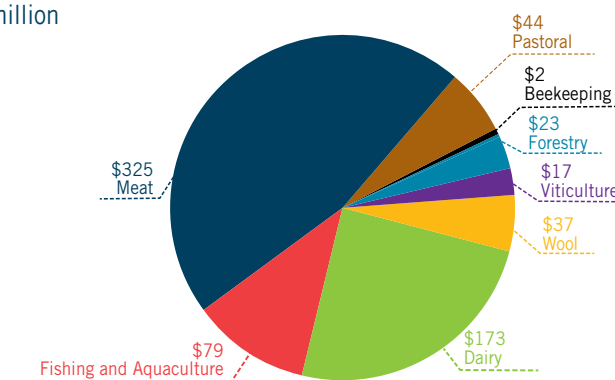
Sector	Programme Name and Co-investor	Total investment \$ million	Sector total \$ million	Estimated benefits \$ billion
Wool	NZ Merino	37	37	0.25
	NZ Sheep Industry Transformation			
Dairy	Transforming the Dairy Value Chain	170		2.7
	Dairy NZ/Fonterra			
Fishing & Aquaculture	New Dairy Products and Value Chains	3	173	0.0086
	Whai Hua Limited Partnership			
	Shellfish – The Next Generation	26		0.081
Meat	Shellfish Production and Technology NZ (SPATnz)			
	Precision Seafood Harvesting	53	79	0.0436
	Precision Seafood Harvesting (PSH)			
Pastoral	FoodPlus – Redefining Meat Horizons	87		0.63
	ANZCO			
	Marbled Grass-fed Beef	23		0.08
Beekeeping	Grass-fed Wagyu Ltd			
	Red Meat Profit Partnership	64		0.194
	Red Meat Profit Partnership (RMPP)			
Forestry	Integrated Value Chain for Red Meat	151	325	1.1
	FarmIQ			
	A New Vision for Pastoral Agriculture	15		0.2
Viticulture	PGG Wrightson Seeds			
	ClearView Innovations	20		0.348
	Ballance AgriNutrients			
Total	Precision Application of Fertiliser in Hill Country	10	44	0.12
	Ravensdown Fertiliser Co-op Ltd			
	High Performance Manuka Plantations	2	2	0.925
Total	Manuka Research Partnership (NZ) Ltd (MRPL)			
	Innovative Steep-land Tree Harvesting	7		0.1
	Future Forests Research (FFR)			
Total	Use of Fumigants for Log and Wood Product Exports	3		–
	Stakeholders in Methyl Bromide Reduction (STIMBR)			
	From Stump to Pump Phase 1 (feasibility study)	14	23	–
Total	Norske Skog Tasman Ltd (NSTL)/Z Energy			
	Lifestyle Wines New Zealand Winegrowers	17	17	0.29
Total			700	7.07

Crown/co-investor investment (in millions)



Crown/co-investor investment by sector (in millions)

Total \$700 million



Total benefits by sector (in billions) per annum by 2025

Total \$7 billion

